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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/033,268	03/02/1998	MARK T. MAYBURY	MTR97-01PA	1887

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EXAMINER

SRIVASTAVA, VIVEK

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 08/02/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/033,268

Applicant(s)

MAYBURY ET AL.

Examiner

Vivek Srivastava

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-57 and 59-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 41-46 and 61 is/are allowed.
- 6) ☒ Claim(s) 38-40, 47-57, 59, 60 and 62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

(1) Applicant argues, that the “extraction or named entities is not equivalent of just any Keyword search”. Further the Applicant’s claim requires presenting a list of named entities and their corresponding frequency of occurrence across many story segments.

The Examiner respectfully disagrees that the extraction of named entities is not equivalent to just any key word search. The extracted keywords placing the stories in categories are also used in searching. Further, as provided in the rejection, the combination of Ahmed, Vora and Ahn teaches presenting a list of named entities and their corresponding frequency of occurrence across many story segments.

(2) Applicant further argues that named entity extractions has been recognized as a specific branch of linguistics and intensively investigated in the past several years. Applicant further argues that “named entities” and their use as event queues in text streams, including named entities such as persons, locations and organizations was defined in the Applicant’s specification, thus automatic named entity extraction from text is not the equivalent of a category definition.

The Examiner disagrees with Applicant’s assertion and specific definition of “named entity”. A “named entity” can be an named being or named object. Although a

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named entity may be recognized as a specific branch of linguistics, it is not limited as such. Further, although Applicant's define named entity in the specification, Applicant's re reminded that the claims are read in light of the specification and that the specification is read into the claims.

(3) Applicant argues that "using the extracted named entities as search criteria to select from among a plurality of story segments" is not taught in Ahmed.

The Examiner respectfully submits that Ahmed discloses this broadly claimed limitation. Ahmed discloses extracting keywords, i.e. sports, travel, computers etc. to classify news stories. These extracted keywords are also used for searching. This Ahmed discloses the broadly claimed "extracting named entities from a text information stream corresponding to the story segment and using extracted named entities as search criteria to select from among the a plurality of story segments".

(4) Applicant's argues that Vora fails to disclose a step of presenting a list of named entities and then a number of indicative of the frequency of occurrence of the named entities. Further Applicant argues that Ahn is not showing or ranking the total number of "hits" of one search term against the other search term.

The Examiner respectfully submits that Applicants arguments are not persuasive since Applicant's are attacking each reference individually. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of

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references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Allowable Subject Matter

Claims 41 – 46 and 61 are allowed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 38-40, 47, 48-54 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed (6,263,507) in view of Vora et al (5,819,273) and Ahn (5,696,963).

Considering claim 59, Ahmed discloses a system which extracts keywords and keyframes and generates summary stories by categorizing the segments of news into various categories. Ahmed discloses selecting a multimedia presentation as a story segment. In particular, Ahmed discloses selecting a story from the clarinet news service, and to categorize the news story in to a subject category (e.g., sports, travel, computers, international news etc., see col 30 lines 5-10). Ahmed further discloses

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classifying text news into categories (see col 29 lines 53-55), and that a user can search using keywords or keyframes (see col 15 lines 43-61 and col 16 lines 56-67). It should be noted that since keywords and keyframes are categorized, i.e. sports, travel, computers, etc, that keywords and keyframes are inherently extracted from the text information stream corresponding to the story segment. It should also be noted that the keywords sports, travel, computers, international news etc. meet the claimed "named entities" location, i.e., sports or travel is a "named entity". Ahmed further discloses a user can search named entities by selecting a named category, like sports, news, travel, computers etc. (see col 30 lines 5-10, col 15 lines 34-39). Ahmed further discloses in response to a user search for headline news, presenting a list of named entities for headline news, i.e. "Insurer's Eye Erin's Costs", "Turkey insurers face major food payouts" and "Erin: A tropical Storm". In addition, by searching headline news, a listing of more "Headline News" is provided (see fig 2B and item 212, 213).

Ahmed fails to disclose presenting a corresponding number of occurrences in story segments over a selected time period. Vora teaches a system in which a user can search articles in a database by selecting a cut of date prior to which no documents are to be retrieved and in which the system ranks documents according the number of keywords present would enable a user to view the most relevant articles (col 10 lines 49-65). Ahn teaches displaying the number of hits of keywords appearing in a documents searched by a user (see Abstract). It would have been obvious modifying Ahmed to include the claimed limitations would have enable a user to retrieve and view the most relevant documents. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ahmed, based on the teachings of Vora and Ahn to include the claimed limitations to enable a user to retrieve and view the most relevant documents.

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Considering claims 38 and 47, Ahmed discloses the steps of extracting text data from the received stream which is used to compile a summary, Ahmed discloses "extracting text information from a text information stream corresponding to the story segment as text data" and "extracting story summary data from the text data (see col 33 line 49 - col 34 line 39). Ahmed further discloses linking together a stored representation of the text data, summary data and name entity data (news, sports, travel, and "Erin: A Tropical Storm" meets the claimed 'named entity data' and 'text' and 'summary' data are met by the data description of "Erin: A Tropical Storm"). Ahmed also discloses, in response to a search query, selecting multiple contiguous portions of the multimedia presentation as story segments and displaying multiple summary elements representative of the extracted story segments (see fig 2-b which displays multiple stories wherein each story has multiple elements including the title, description, time and location, and col 15 lines 25-50).

Considering claim 39, Ahmed discloses storing the all the data including summary data, named entity data for story segments as one or more files on a file server (file server met by "data storage device 104" in fig 1). Further, the server is connected to the Internet which meets the "computer network" limitation (see col 11 lines 1-7 and lines 40-65). Further, since a user can "browse" the data and categories, Ahmed discloses the claimed "allowing access to the stored representations of news story segments available to a browser program running on the client computer connected to the network" (see col 11 lines 31-65).

Considering claim 40, Ahmed discloses classifying text news into categories (see col 29 lines 53-55), and that a user can search using keywords or keyframes (see col 15 lines 43-61 and col 16 lines 56-67). It should be noted that since keywords and keyframes are categorized, i.e. sports, travel, computers, etc, that keywords and

keyframes are inherently extracted from the text information stream corresponding to the story segment. It should also be noted that the keywords sports, travel, computers, international news etc. meet the claimed "named entities" location, i.e., sports or travel is a "named entity".

Considering claim 48, Ahmed discloses the plurality of elements of the story displayed together including the title, description, time and location (see fig 2-b).

Considering claim 49, Ahmed discloses the name of the summary (see "Erin: A Tropical Storm" in fig 2-b; sports, news, travel as discussed above, and 'Clarinet' in col 30 lines 5-10) and thus discloses the claimed limitation.

Considering claim 50, Ahmed discloses the claimed "summary of sentences" (see description of "Erin: A Tropical Storm" in fig 2-b).

Considering claim 51, Ahmed discloses the claimed summary presentation elements comprise a hyperlink to a source media element of the segment (see fig 2-b, hyperlinks 213 and 214 take user to source of information).

Considering claim 52, Ahmed discloses the claimed hyperlinks which lead to presentation of additional elements of the story segment including named entities (see fig 2-b, selecting "Headline News" leads to headline news stories and selecting the sports link 215 leads to sports news, stories and named entities).

Considering claims 53, 54 and 62, Ahmed discloses selecting a hyperlink for searching for related stories and presenting a thumbnail view comprising key frames from the multiple story segments (see fig 2-b, by selecting "Headline News", news under "Headline News" is searched and retrieved and displayed including the "Headline News" keyframe 213 and multiple story segments 214).

Claims 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed (6,263,507) in view of Vora et al (5,819,273) and Ahn (5,696,963), as applied to the claims above, and further in view of Youman et al (5,629,733).

Regarding claim 55, claim 55 recites some of the same limitations as recited above, and thus is rejected for at least those reasons provided above. Claim 55 further recites presenting a plurality of related story segments using a layered hierarchical presentation of the summary representations at a relatively high hierarchical level and the source data at a relatively low hierarchical level, together with hyperlinks permitting navigation among related story segments to a desired hierarchical level representation.

Ahmed discloses displaying a plurality of related summary story segments (see stories for "Headline News" in fig 2-b) with source information (see "Headline News" icon 213 on the right) and hyperlinks 215 at the top (see fig 2-b).

Youman teaches displaying hierarchical levels with a summary of a program located at the top of the screen with the source information at the bottom (see fig 24a). It would have been obvious from Youman placing the source information on a lower level of the screen would have provide a better viewing of the summary since the source information would not be in the way i.e. in the lower corner. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ahmed to include the claimed hierarchical level to place the more important information like the summary information on top and the source of the information on the bottom to provide a more clearly prominent display of the important summary information.

Considering claim 56, Ahmed discloses the claimed information is a text stream, the source data is text relating to a story segment and the summary representation

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includes named entities (see fig 2-b, named entities met by "Erin: A Tropical Storm" the story segment is met by the summary description of "Erin: A Tropical Storm").

Considering claim 57, Ahmed discloses viewing image data (see fig 2-b) and thus discloses the claimed "information stream is an image stream". Further, Ahmed discloses displaying frames of information including a title and summary (see item 214 fig 2-b, frame 214 meets "keyframe" limitation).

Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed (6,263,507) in view of Vora et al (5,819,273) and Ahn (5,696,963), as applied to the claims above, and further in view of Niwa et al.

Regarding claim 60, the combination of Ahmed, Vora and Ahn fails to disclose the claimed in response the a search query, presenting a graph of named entities and their corresponding frequency of occurrences in story segments over a selected time period and the claimed in response to selection of a point on the graph of named entities, presenting the user with an overview story segments containing the selected named entity.

Niwa teaches as system which graphically displays keywords and the frequency of occurrences noting that words with a higher frequency are presented first or in a higher location on the longitudinal axis on the graph (see col 2 lines 15-30). It would have been obvious modifying the combination of Ahmed, Vora and Ahn to include the claimed limitation would have provide a user with a frequency of named entities providing a user with documents, stories, keywords, or keyframes which are most relevant.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Imanaka et al (6,064,952) – Information abstracting method

Shiomi et al (6,009,439) – Data retrieval support apparatus

Walls et al (5,848,410) – Selective and continuous index generation

Schultz (5,640,553) – Relevance normalization in response to a search query

Register et al (5,371,807) – Method for text classification

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308- 5399 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivek Srivastava whose telephone number is (703) 305 - 4038. The examiner can normally be reached on Monday - Thursday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andy Faile, can be reached at (703) 305 - 4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305 - 3900.

VS

7/28/04


VIVEK SRIVASTAVA
PRIMARY EXAMINER